

CIO

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BY DIANE FRANK



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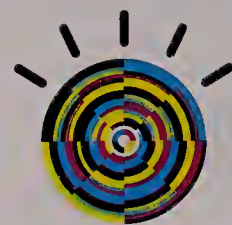
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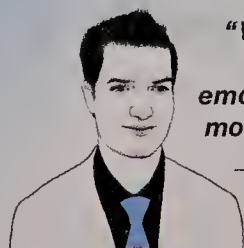
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SMARTER PLANET.



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INNOVATION & BUSINESS VALUE

Salespeople close more deals thanks to do-it-yourself analytics tools **8**To be great, companies must first confront harsh realities **10**Adidas Latin America turns to the cloud to streamline processes **12****8****Run**

LEADERSHIP & OPERATIONAL EXCELLENCE

IT and physical security staff should work together for the best protection **14**Cut down on shadow IT by changing the way you communicate **16**To find the best employees, don't wait till December to go talent-shopping **18****14****Connect**

PEER ADVICE

How to build tools your sales team will actually want to use **30**Get peer advice on leading diverse teams, handling IT abroad, and more **31**Incorporating information security in your company's risk profile **32****30****Finish**Index **34**Little girls don't need Barbie's dream house—now they can build their own **36****36****Moneymakers** **20****COVER STORY** A select few CIOs are generating **cold hard cash** through innovation and collaboration

BY DIANE FRANK

Boeing CIO **Kim Hammonds** says about 10 percent of her IT organization works on revenue-generating efforts, and that group may grow in the future.





FROM THE
EDITOR IN CHIEF

start

CIO Triple Threats

The world of work, as I see it, runs on three distinct kinds of talent. There are people who love to create, people who excel at managing, and people who were born to sell.

Most of us are very strong in one area, reasonably good in another and do our best to avoid the third. Editors are creators and managers, for example, but rarely are we any good at sales. The late Steve Jobs was extraordinarily gifted at creating and selling, but he struggled to become a better manager.

In my little model of the world, it's exceedingly rare to be a triple threat: equally talented at creating, managing and selling. Most of the CIOs I know, for example, have formidable strengths in management and creativity (especially in problem-solving), but the drive to sell is rarely part of your DNA.

So I had mixed feelings while reading our cover story about revenue-generating CIOs ("Moneymakers," Page 20). How much more, I wondered, can we expect from the CIO job these days? The answers in our story may surprise you—they may even inspire you.

We found several examples of CIOs who've found creative ways to generate revenue without adding "VP of sales" to their titles. Some were deploying IT to pump up showroom sales or generate new leads. Others were selling homegrown software to other companies, or turning valuable data into a profitable information service. Everybody was bringing their internal business strategist to work each day.

At Quintiles Transnational, for example, CIO Richard Thomas and his staff repurposed internal analytics systems into a commercial product line that's brought in more than \$40 million in new business for the biopharmaceutical services firm. At AIG's Advisor Group subsidiary, COO David Ballard saved the business unit by launching client-management tools for financial advisers. At Boeing, CIO Kim Hammonds devotes 10 percent of her IT organization to revenue-generating activities by giving logistical support to major contracts. Becoming a revenue generator requires CIOs to separate core IT processes from those likely to be competitive differentiators, says CIO Randy Gaboriault of Christiana Care Health System, which earned tens of millions by selling telemedicine services to other hospitals.

Yet while the CIO role certainly has the potential to generate revenue, only a small percentage actually manage to do so, says consultant Peter High of Metis Strategy. "It's the particularly clever CIOs who recognize this advantage and grab hold of it." So follow the leaders: the triple threats.

Maryfran Johnson, Editor in Chief, CIO Magazine & Events
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CHATTER

CMOs Need IT Guidance

CMOs are **buying IT on their own** because cloud computing services are so readily available. Contributing Writer Jeff Vance says CIOs should work with marketing to **give guidance** about hosted software applications and technologies that manage the **volumes of data** they're collecting. www.cio.com/article/719492

Remote Workers Suit IT

More and more IT professionals are doing at least some of their **work from home or a remote office**. Senior Online Writer Richard Hein says instant messaging, **document-sharing apps and video-conferencing** can boost remote workers' productivity while alleviating their isolation. But offsite workers must have **great communication skills**, be passionate about their work, and be excited about working from home. www.cio.com/article/718227

Making Sense of Data

The federal government is working to figure out how to apply analytics technology to identify the most **useful nuggets of data** among its reams of information, and to find a way to make that data **available to the public in a timely manner**, says Contributing Writer Jason Bloomberg. The goal is to avoid drowning in irrelevant information. www.cio.com/article/719387

Correction

In our Nov. 15 cover story, "Clueless in the Boardroom," we incorrectly stated that Dun and Bradstreet's board of directors includes executives from Hewlett-Packard and Oracle. In fact, the board includes a former HP executive, and the board member from Oracle resigned earlier this year.

Compiled by Staff Writer Lauren Brousell. Have a comment about a story in this issue? Go to www.cio.com/issue/20121201 or write to letters@cio.com.

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FROM THE **CEO**

Your Top 10 for '13

As we approach the new year, I share 10 of my all-time favorite quotes paired with some questions to spark your thinking about CIO priorities for 2013.

10. "The medium is the message." Philosopher Marshall McLuhan's phrase still resonates in our four-screen world of TV, desktop, tablet and smartphone. How can you optimize the user medium to enhance the business message?

9. "All software is going to look like Facebook." Salesforce CEO Mark Benioff's remark predicts a world in which software is self-explanatory. How does that change the CIO role?

8. "Accumulating data about you isn't just a strange hobby for these corporations. It's their whole business model. And you are not their client. You are their product." Senator Al Franken's observation about the big business of big data could mean big opportunities for our industry. What are the ramifications for your business?

7. "Simplicity is the ultimate sophistication." Leonardo da Vinci's saying reminds us that the era of IT complexity must end. What legacy systems will you retire this year?

6. "The whole is greater than the sum of its parts." Aristotle wasn't thinking of cloud or mobile devices here, but his aphorism still applies to technology. How will you integrate these tools to create new business opportunities?

5. "It's technology married with liberal arts, married with the humanities, that yields us the result that makes our heart sing." Steve Jobs reminded us how much design matters. Where can CIOs put good design to work?

4. "Resistance to change is often just a lack of clarity." Business author Dan Heath nailed it. Where can you clarify the mission for your IT troops?

3. "Never mistake activity for achievement." Basketball coach John Wooden made a great point: Are you working hard without delivering business value?

2. "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn." Futurist Alvin Toffler saw the value of lifelong learning. What will you relearn this year?

1. "You better start swimming or you'll sink like a stone, for the times they are a-changin'." Bob Dylan probably doesn't know many CIOs, but we do. Is there any C-level exec more adept at change? (Keep up the great work!)

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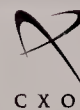
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HealthHelp CIO **Steve Spar** says a self-service analytics approach lets employees analyze customer data and answer simple questions without costly delays.

Analytics Close the Deal

Easy-to-use software lets salespeople quickly crunch data to boost their win rate **BY STEPHANIE OVERBY**

The sales team at HealthHelp had always made one thing clear—the faster they could respond to RFPs from potential clients, the more sales they could close.

As a specialty benefits management provider, HealthHelp works with health insurance companies to help their network physicians find the best tests and treatments for patients. To win new business, HealthHelp demonstrates how it might improve outcomes by running a variety of analyses on a health insurer's data about its claims, providers and members. Running analyses was once a cumbersome process requiring weeks of back-and-forth between the salesperson and HealthHelp's business analysts, who wrote custom scripts to pull information from various databases. Errors occurred. And by the time it was done, the potential customer may have lost interest—or faith—in the company.

HealthHelp CIO Steve Spar had previously implemented a data warehouse, migrating the company's reporting metrics to SQL Server Analysis Services (SSAS). But that still required ►►►

..... **16%** People who would like to prevent websites from tailoring the ads they see based on what sites they previously viewed. Berkeley Center for Law and Technology

BIG DATA ANALYTICS:

Meeting Business Needs and Raising IT's Profile in the Organization



As data stores continue to grow and business units recognize their potential value, the demand for Big Data analytics increases. And IT faces the critical task of preparing the IT infrastructure for this business-enabling technology.

But CIOs have a choice. They can react to business demands for Big Data analytics capabilities as they come along, or they can play a proactive role enabling the business and, as a result, raise IT's profile within the organization. Doing so requires a strategy for implementing a Big Data analytics solution.

According to a joint survey conducted by CIO and SAS, "Infrastructure Readiness for High-Performance Analytics," more than two-thirds of survey respondents have plans or are prioritizing plans to modify or build an enterprise-wide architecture to support Big Data analytics requirements. And that's good, because two-thirds of respondents are already experiencing increased demand—coming largely from operations and finance—to support new analytics capabilities. In order to get ahead of Big Data analytics

demands, CIOs and their IT organizations need to act now.

So, where do you start? The IT infrastructure may need to support any number of Big Data architectures: data warehouses, private cloud, in-database analytics, analytic appliances, high-performance computing, complex event processing, etc. Given the number of technologies and limited budgets, CIOs must be strategic in their investments and prioritize the elements of their Big Data architecture to reflect the needs of business users.

Survey respondents whose organizations view these as strategic investments report that *by the end of 2012* the following architectures will need to be supported in their organizations:

- **In-memory processing**—Ideal for Big Data, in-memory analytics enables detailed data to be loaded into memory for rapid analytical calculations and queries. Analytical processes run in parallel in a distributed manner on all the data in the memory, enabling users to solve complex business scenarios and uncover timely and reliable insights.
- **Hadoop**—Hadoop is an open source framework that is drawing interest as a low-cost alternative for Big Data

storage, uses commodity-based hardware and performs distributed processing. IT organizations are looking into Hadoop as an infrastructure component and options on how to integrate and analyze data stored in it.

- **In-database analytics**—Instead of moving data from a database into an analytics environment, in-database analytics brings the analytics processing to the data. Less data movement enables faster predictive insights and better data governance.

For a CIO looking to provide business with a strategic advantage and raise the profile of IT while doing so, Big Data analytics doesn't stop with these tools and capabilities. Business units will have jointly evaluated with IT whether the Big Data analytics solution meets their specific requirements and determine the project's success.

To learn which Big Data analytics capabilities CIOs should prioritize and the criteria business units will use to evaluate the solution, download the white paper at www.cio.com/white-papers/sas-big-data

analysts with knowledge of both SSAS and benefits management, which is rare.

To cut out the middle man, Spar rolled out Tableau Software, an analytics tool he says is as easy for his company's knowledge workers to use as Excel. Thanks to real-time visual analytics, members of the sales team can, without help from business analysts, run a variety of analyses on a potential customer's data and include the results in their RFP responses.

Spar says the faster, self-service analytics approach has increased the sales team's "win rate."

The team can also analyze customer data to identify opportunities to cut costs, improve performance, or implement new tests and treatments in areas such as cancer or emergency medicine. "All those things contribute to our ability to sell additional new products," says Spar, noting that the new system has contributed to HealthHelp's 85 percent revenue growth over the past two years.

Client services staff use the Tableau dashboard to answer straightforward questions about cost trends or utilization—now they only need to involve the business analytics team on more complex inquiries.

The business analysts were initially skeptical. They were well aware of the inefficiencies of the status quo and wanted to eliminate errors more than anyone. But "they weren't sure what it would mean for them," says Spar. So he included them from the beginning of the project, starting with software selection. "Over time, they saw how this would relieve them of some of that heavy lifting."

The more technically inclined medical directors on staff have begun playing around with Tableau. The software "makes it intuitive and easy to create pivots and graphs of even complex business data," says Spar. "In this line of work, once you get an answer, it prompts more questions. The ability to zoom in on what you find is what makes these tools so much more powerful than outsourcing your questions to the analysts."

Stephanie Overby is a freelance writer based in Massachusetts.

The software "makes it intuitive and easy to create pivots and graphs of even complex business data."

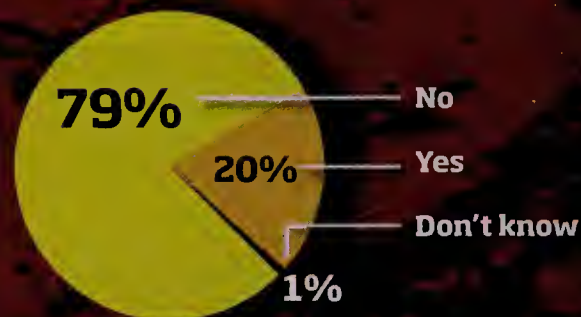
—Steve Spar, CIO, HealthHelp

crunch

Where's Your **CIO Backup Plan?**

Most CIOs are better at backing up their data than they are at succession planning for their own job

Have you identified a successor to take over as CIO if you unexpectedly have to stop working?



SOURCE: ROBERT HALF TECHNOLOGY POLL OF 1,400 CHIEF INFORMATION OFFICERS, 2012

Author: Great Leaders Face Brutal Facts

Jim Collins, author of the best-seller *Good to Great*, says "a data-driven approach" is what makes a great company tick and distinguishes it from others.

In times of uncertainty, most people are wired to look at what other people are doing. "But leaders turn to data and empirical evidence rather than social proof," Collins said in his keynote address at SAS Institute's recent Premier Business Leadership event in Las Vegas.

"It is important to have good data," he says. "Change begins when you pick up the facts and you confront the brutal facts. If you don't have the mechanism to confront real facts, you won't be great."

Collins identifies three characteristics of innovative companies: fanatic discipline, productive paranoia and empirical creativity. "The true productive paranoids," he says, "are constantly confronting the facts."

He says analytics plays a big role in innovation. "Do something creative and validate it," he says. Great leaders have "a wonderful blend of creativity and discipline."

—Divina Paredes

..... **56%** Companies that are planning to spend more on e-commerce technology this year than they did last year. Forrester Research

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Christian Bader, head of IT,
Adidas Latin America

ADIDAS LATIN AMERICA

Getting Control Over Spending

BY STEPHANIE OVERBY

THE PROJECT :: Adidas Latin America decided to implement cloud-based procurement software to improve internal compliance and consolidate spending management. The company is a regional subsidiary of the Adidas Group sporting goods empire, which includes brands such as Adidas, Reebok and Rockport.

THE BUSINESS CASE :: Procurement at \$1.4 billion Adidas Latin America was complex—involving different currencies and languages—and disjointed. Some countries had developed homegrown procurement solutions; others had paper-based processes. “If we were a small organization, that might have continued to work,” says Adidas Latin America’s head of IT Christian Bader. “But we were growing fast, and we weren’t getting the visibility we needed.”

Seeking to improve internal audit compliance and streamline spending, Bader evaluated several spending-management solutions and decided on Coupa for its multi-national support, total cost of ownership, integration with the ERP system, and capacity for customization.

FIRST STEPS :: By opting for a hosted system, Bader was able to fully implement Coupa in Panama—where the company’s Latin American operations are based—in six weeks earlier this year. Bader started with the country that had the most advanced procurement processes already in place and adopted an 80-20 attitude. “You will never cover all the cases you need to handle in one system,” Bader says. “We wanted to address the most common processes and keep it simple.” Cash advances for travel, for example, will not be done in Coupa. “I’d rather leave it out than blow up the whole system to get it in,” Bader says. Next up is Chile, where there was no software in place, so the implemen-

tation will take longer, one department at a time, starting with human resources. Later this year will come Argentina, Peru, Brazil and finally Mexico—simply because they were already deep into a massive warehouse management system implementation. IT is managing the introduction of the cloud-based system remotely from Panama City, keeping the cost of the project low. Bader opted to add on Coupa’s business intelligence tool, the Spend Optimizer, so employees can see on their own how much they’re spending and on what. “We shifted the ownership and workload [associated with that] from finance, which should not have to do it, to the people actually doing the procurement,” Bader says. Soon, Adidas Latin America will centralize its spending management and consolidate its business with certain vendors, leading to lower costs.

WHAT TO WATCH OUT FOR :: Adidas Latin America’s complex account structure made integration between Coupa and SAP difficult. “It created a lot of stress, but we solved it,” says Bader. “We should have addressed it before we started the project, but we were moving too fast.”

But change management was the biggest challenge. “Our experience, especially in Latin America, is that you have to get the buy-in of the full organization, from the warehouses to marketing to HR to IT,” says Bader, a German who joined the Latin American subsidiary in 2004. Bader held town meetings to address doubts and concerns. “You can’t just go out there and force it,” he says. “Especially in Brazil—forget it! You have to do this with them and take the time to convince them, or you will fail.”

Stephanie Overby is a freelance writer based in Massachusetts.

.....**4.4 million** IT jobs that will be created around the world in the next three years to support big data analytics. Gartner.....

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Mind the Security Gap

Marrying physical and IT security can prevent intruders from waltzing away with valuable data and assets **BY KIM S. NASH**

The night watchman and the IT security guy rarely work together even though their jobs, at the core, are driven by the same goal: to protect the company. Physical and information security often remain separate entities by happenstance and by history. But integrating the two can better protect assets, employees and valuable data.

Austin Recovery, a drug-and-alcohol treatment center, recently finished such an integration, rolling out RedCloud's physical-access-control system to secure the campus buildings and doors, linking the system to internal HR directories. The new security setup also controls how sensitive information is handled: No one can print, copy or fax such data without proper badge authentication.

Too many companies leave holes unplugged. Companies in retail, financial services, oil and gas, hospitality, food service, manufacturing and elsewhere suffered a combined 855 data breaches ▶▶





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►►► **Security** Continued from Page 14

in 2011, according to Verizon, which works with enforcement agencies in four countries to study breaches. About 10 percent of the incidents also involved a physical breach, such as getting physical access to a device or system with sensitive information or swapping legitimate access codes for fakes, to invade an office or machine.

Keeping physical and information security separate can create gaps that let intrusions go unnoticed, says Michael Assante, president and CEO of the National Board of Information Security Examiners, a research group that focuses on professional development of security specialists. The separation can also lead to a weak response once an incident is discovered, he says. Security teams that combine physical and information staff, however, can apply a variety of investigative techniques to find problems sooner, Assante says.

At Austin Recovery, one concern was that former employees, friends, family or other outsiders could get into the center through unwatched, unlocked doors or by printing fake name tags, says Jonathan Ross, president and CEO. Ross recalls that recently "an aggressive person" whom Austin Recovery had fired was threatening to come back. The IT manager locked down the front door, which automatically required employees to swipe their badge cards to get in and compelled other visitors to use the outside intercom. The threat turned out to be empty, Ross says, but he felt better able to protect employees and patients because of the new technology.

The system also prevents employees from printing, faxing and copying data without the right badge credentials, helping maintain compliance.

Getting employees to use new processes can be a slog, Assante says. So can blending the cultures of the physical and information security staffs. Assigning a cross-discipline team to conduct an integrated security assessment is "a great starting point," he says.

Ross approached the change in phases, using email and meetings to have managers spell out why the new policies are important—safety, less risk, better compliance with regulations—and repeating many times that employees must comply.

"You can't just announce one day, 'If you don't do this, you're going to get in trouble,'" Ross says. "You have to get them to understand why it's so important."

Senior Editor Kim S. Nash can be reached at knash@cio.com. Follow her on Twitter: twitter.com/knash99.

How to Keep Employees from Circumventing IT

BY THOR OLAVSRUD

One of the most important things you can do when dealing with the consumerization of IT in the enterprise is to train your IT staff to stop saying "no." Instead, IT professionals must try to understand the user's business problem and seek a solution, says Noah Broadwater, CTO of Sesame Workshop, the producer of *Sesame Street*.

Speaking at CITE Forum in New York City in October, Broadwater described how Sesame Workshop embraced the consumerization of IT to make employees happier and more productive.

Saying 'No' Leads to Shadow IT: "Today, business users are very savvy," he says. "They know what they want and what they need. They expect technology to be easy and intuitive, as simple as what they see on their iPad or iPhone. But what they don't understand is that it isn't easy for IT to make that shift."

If the IT organization responds by saying "no," users will turn to shadow IT to get what they want, using an unsanctioned device, application or service, like Dropbox.

For instance, Broadwater says, an employee might decide he needs the full Adobe Creative Suite, and if IT doesn't provide it, the employee might purchase it at the full retail price and expense it to the company—a problem for any enterprise, but especially tricky for a nonprofit like Sesame Workshop.

"We stopped saying no," Broadwater says. "'No' has become the word I hate the most from my staff. If you say, 'Let me understand what you're trying to solve, and I'll try to help you,' then they don't try to go around you."

Governance Required: That's not to say Sesame Workshop approves every request. The organization requires a legitimate business reason before approving certain technologies or purchases. Broadwater established a governance steering committee with representatives from the legal and finance departments, and from the lines of business. The panel evaluates technology requests and associated risks.

The next step was to create a simple policy. "Don't create policies that look like a lawyer wrote it," Broadwater says. "You don't want a 10-page policy that they're not going to read. Create simple, actionable policies."

Sesame Workshop also holds "Lunch and Learn" sessions about once a month to educate employees about technologies and how to use them safely. Plus, employees who want to bring their own devices to work need to attend two special training sessions before they are allowed to do so.

Thor Olavsrud is a senior writer for CIO.com.

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Avoid the Holiday Rush

It's better to stock your talent pool throughout the year than to make a hasty hire in the frenetic days of December **BY KRISTEN LAMOREAUX**

December can make normally stable people insane with holiday shopping, family get-togethers, vacations and end-of-year business commitments. Add a flurry of hiring activity—due to anxiety over use-it-or-lose-it headcount policies—and you're sure to want to step in front of a snowplow.

IT leaders say the problem is that the end-of-year rush leads to poor hiring decisions.

Rusty Patel, former CIO of VWR International, a \$4 billion global laboratory supplier, shied away from the use-it-or-lose-it practice. "We certainly vacillated from time to time, as most companies do, regarding the affordability of the hire within a given time frame, such as a quarter. But once we decided we wanted to make the investment in new talent, we moved forward deliberately."

Patel says "deliberately," I say "quickly." If you want a competitive advantage in the talent wars, speed matters. Organizations that are game to hire need to get in the game. Talent is in demand and hiring managers who overanalyze are missing out. Even a company as large as VWR was able to select some director-level hires within a month and technical contributors in a matter of weeks.

The Cost of a Bad Hire

But Patel also warns against moving too quickly in reaction to a use-it-or-lose-it policy. "If my organization went through the process to justify the need for a hire and then didn't make sufficient progress with the search, we had a conversation about priorities. But that's quite different from filling a slot opportunistically, perhaps blindly, that may or may not disappear at some point in the future."

In other words, don't let the December rush produce a bad hire. "The cost of bringing in the wrong talent to address a justified need can often be more dramatic than making do without," Patel says.

While Patel doesn't feel searches should have expiration dates, he emphasizes that getting the green light to hire doesn't mean it's OK for the search to take forever.

"Like most expected outcomes in business, I believe searches should have reasonable completion time frames. Without that, the organization can become fatigued, lose focus, or adapt and solve the gap in a less-than-optimal way, causing strain elsewhere."

Strain is a mild word. Those employees doing the work of two, three or even four people don't take too kindly to being told that that workload will be theirs forever. So how do you balance it? "When we were not able to identify compelling candidates, I asked folks to assume the role for which they were leading the search. But I tried to be thoughtful in

relieving or transitioning other responsibilities of theirs—to ensure focus and avoid unnecessary stress," Patel says.

Fill the Talent Pool Year-Round

So what's a CIO to do? Instead of reacting to use-it-or-lose-it policies with a frenetic hiring spree in December, get proactive and set a steady pace of talent acquisition throughout the year. "It's important to build a candidate bench of qualified talent. It's the only reliable and cost-effective way I've found to address the need," says Patel.

Even if your organization doesn't espouse a use-it-or-lose-it philosophy, December can be a challenging month for your hiring process. "Calendar and fiscal deadlines did not complicate hiring decisions," Patel says, "but year-end holidays certainly impacted availability."

And it's not just the job candidates who are away for the holidays. Your hiring managers may have December plans, too. Take a family vacation in Aruba or stay to hire a data architect—hmm, that's a tough decision. Happy Holidays!

Kristen Lamoreaux is president and CEO of Lamoreaux Search, which finds IT professionals for hiring managers.

Beware of making poor hiring decisions in reaction to a use-it-or-lose-it headcount policy.

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Money**makers**

A select few CIOs are generating cold hard cash through innovation and collaboration

BY DIANE FRANK

Advisor Group, a subsidiary of multinational insurance company AIG, was on the brink of being sold or disbanded five years ago because it was losing business. The broker-dealers and investment advisers who used the company's client-management tools and forms were not seeing enough value to convince them to stay—until IT stepped up to give them a reason.

"We spent a lot of time over the last couple years almost reinventing ourselves," says David Ballard, who was recently promoted from CIO to COO. By developing a one-stop online portal for all the services and processes that used to be scattered and paper-based, IT created a service that made advisers' daily work lives better. Now they are choosing Advisor Group in numbers the company hasn't seen in years. The adviser retention rate has grown steadily from 86 percent in 2009 to 98 percent in 2012.

Top-notch CIOs in various industries are creating new ways to pull in revenue at their companies. The techniques vary widely: Some use IT to boost showroom sales, or sell homegrown software to other companies. Others take the valuable data they produce in-house and turn it into a saleable information service.

These standout CIOs look beyond the compa-

ny's walls and are viewed as full peers by the rest of the C-suite. They are at the top of what Ballard and other members of the CIO Executive Council, a global peer advisory service and professional association founded by CIO's publisher, call the Future-State CIO Journey. CIOs who make their way through the journey's framework begin with being seen as credible service providers, evolve to being influential and transformational business partners, and finally become strategic business peers who boost the bottom line.

The CIO position has always had the *potential* to generate revenue, says consultant Peter High, founder of Metis Strategy and author of *World Class IT: Why Businesses Succeed When IT Triumphs*. But he estimates that less than 25 percent of all CIOs have taken the leap to becoming revenue producers.

"It's the particularly clever CIOs who recog-



CIO **Kim Hammonds** has positioned her IT group to help Boeing's defense unit win government contracts that require logistical support, such as data centers and applications.

nize this advantage and grab hold of it," he says. "It's not the average CIO by any stretch of the imagination."

There is no one path to becoming a revenue-generating CIO. Some CIOs are in the game from the start with the full backing of the CEO, the board and other power brokers in the company. Others must battle from behind to prove they should be there.

Find Out What Customers Need

Advisor Group survives because, for a \$1,000 fee, independent financial advisers affiliate with one of Advisor Group's broker-dealers for access to an array of services, including technology and regulatory compliance. The brokers are usually small businesses, and the more time they spend on chores like filling out forms and collecting paperwork, the less time they can spend with their clients.

Five years ago, IT at Advisor Group was considered a support function, Ballard says. "The business had no confidence that the IT organization could support the business model of providing tools to advisers," but the business also realized that under the status quo, it was in deep trouble.

Ballard met with leaders throughout the company, then personally visited the advisers and broker-dealers to figure out what they really needed. He learned that the existing, primarily paper-based tools were adequate and that competitors didn't have anything better. But Ballard quickly realized that his company could leapfrog the competition if IT could provide a one-stop, accessible-anywhere portal with automated versions of those tools.

The online CRM portal isn't revolutionary, but it makes a significant difference in the day-to-day work of advisers, Ballard says. Every time advisers can take advantage of pre-populated forms, that's one less time they have to start from scratch for each new transaction with an existing client. And allowing electronic signatures and digital images of paperwork means transactions can be completed on-site rather through mail and faxes.

"Now we like to say that we've got what everyone else has, but no one has what we have," Ballard says.

Organizing for Success

Boeing makes its money in two very different markets. The commercial air division sells planes and related services, while the defense division relies primarily on winning government contracts. CIO Kim Hammonds has spent the last few years positioning her group to make it easier for the defense sector to achieve that goal, and they are succeeding. In 2010, Boeing's UK defense subsidiary won a \$1.1 billion contract to support the British Ministry of Defence's sea, air and land logistics. The organization that is providing that logistical support: Boeing IT.

Support in this case involves building data centers, integrating the ministry's approximately 200 logistics applications, and more. This is only one of several big contracts that Hammonds' IT staff is part of, and she has plans for that role to grow by working even more closely with company leaders. "I want to heighten awareness of this capability," she says.

IT staffers dedicated to this effort collaborate with business

Listen to Many Voices

Revenue-generating ideas can come from any part of the organization. Your job is to ensure that everyone can be heard.

Michelle McKenna-Doyle, who joined the National Football League in September as a CIO focused on creating new services for fans, says the path to generating revenue starts with innovation. But she cautions CIOs not to carve out a special innovation shop, because there's a danger that the more functional positions in the IT group will be seen as unglamorous or undesirable, which can trigger a split in the IT department. "Innovation," she says, "has to weave its way through the whole organization."

At several companies she's worked for, McKenna-Doyle has created an innovation

council within IT that people routinely rotate through. Council members come from various IT disciplines, so everyone gets a say in the new ideas.

"A lot of the revenue-driving ideas actually live at the base level of the people keeping the lights on," she says. "They're the ones who will see the most waste or the most opportunity."

But it's not easy to get IT people at that level to speak up, especially in a meeting with talkative marketing staff. McKenna-Doyle suggests taking advantage of the social media tools now available to help IT people make contributions.

When she was CIO at Constellation Energy, McKenna-Doyle deployed

innovation-management software called Spigit. This idea-generation tool awards points for contributing innovative ideas, then rewards people for having the most ideas. But it would be easy for these suggestions to simply go into a bucket and be forgotten. To ensure that didn't happen, McKenna-Doyle created a process for the group to decide which submissions should get a chance to move forward. The people associated with those proposals then have a role in shepherding them to fruition.

Using these crowdsourcing tools and keeping everyone involved in innovation, McKenna-Doyle says, will help IT organizations be seen as a source of ideas, value and revenue.

-D.F.

VIEWPOINT



Donald Farmer

VICE PRESIDENT OF PRODUCT MANAGEMENT, QLIKTECH

Donald Farmer, QlikTech's vice president of Product Management, works with customers and partners to establish QlikView as the leading solution for business discovery. He has more than 20 years' experience in analytics and data management, having worked as a consultant, in startups and as a leader of Microsoft's BI product teams. Farmer is a speaker at many international events on business intelligence, data integration and data management; a blogger; and the author of several books.

FOR MORE INFORMATION on the new generation of the QlikView Business Discovery platform, download "The 'QlikView.next' Product Scenarios" at www.cio.com/whitepapers/qlikview2

QlikView



Custom Solutions Group

The Journey of Business Discovery

QlikView Enables the New Enterprise by Empowering Users

QlikTech Vice President of Product Management Donald Farmer talks about the philosophy and vision that is driving the next generation of the QlikView Business Discovery platform, QlikView.next.

QlikView uses the term *business discovery*, rather than *business intelligence (BI)*. What's the difference?

BI involves investigating and understanding the patterns and data in scenarios you already know and understand well enough to build a model around them. Business discovery is finding answers to questions you don't even ask.

For example, an international cosmetics company customer of ours faced problems in the wake of the Fukushima earthquake and tsunami. It investigated the impact on its Japanese resellers, but in using our tool, discovered that critical suppliers of highly specialized ingredients such as seaweed extracts were based in Japan. This discovery enabled the company to foresee and plan for possible shortages.

What potential does QlikView.next have to change the relationship between IT and users?

It empowers users. In the last two years, consumer technology has improved so much that today consumers have better technology at home than they do at the office. IT no longer has to provision everything. That changes the relationship between IT and the business user. IT is becoming more like a supply chain process, enabling business discovery rather than simply providing business intelligence. We call it the new enterprise.

What else is driving the emergence of the business user as a key customer for IT?

In addition to enabling the new enterprise, our vision for QlikView is based on the following ideas: gorgeous and genius, compulsive collaboration, mobility with agility and the premier platform. The first theme is about design. Our software is gorgeous not only because it's easy

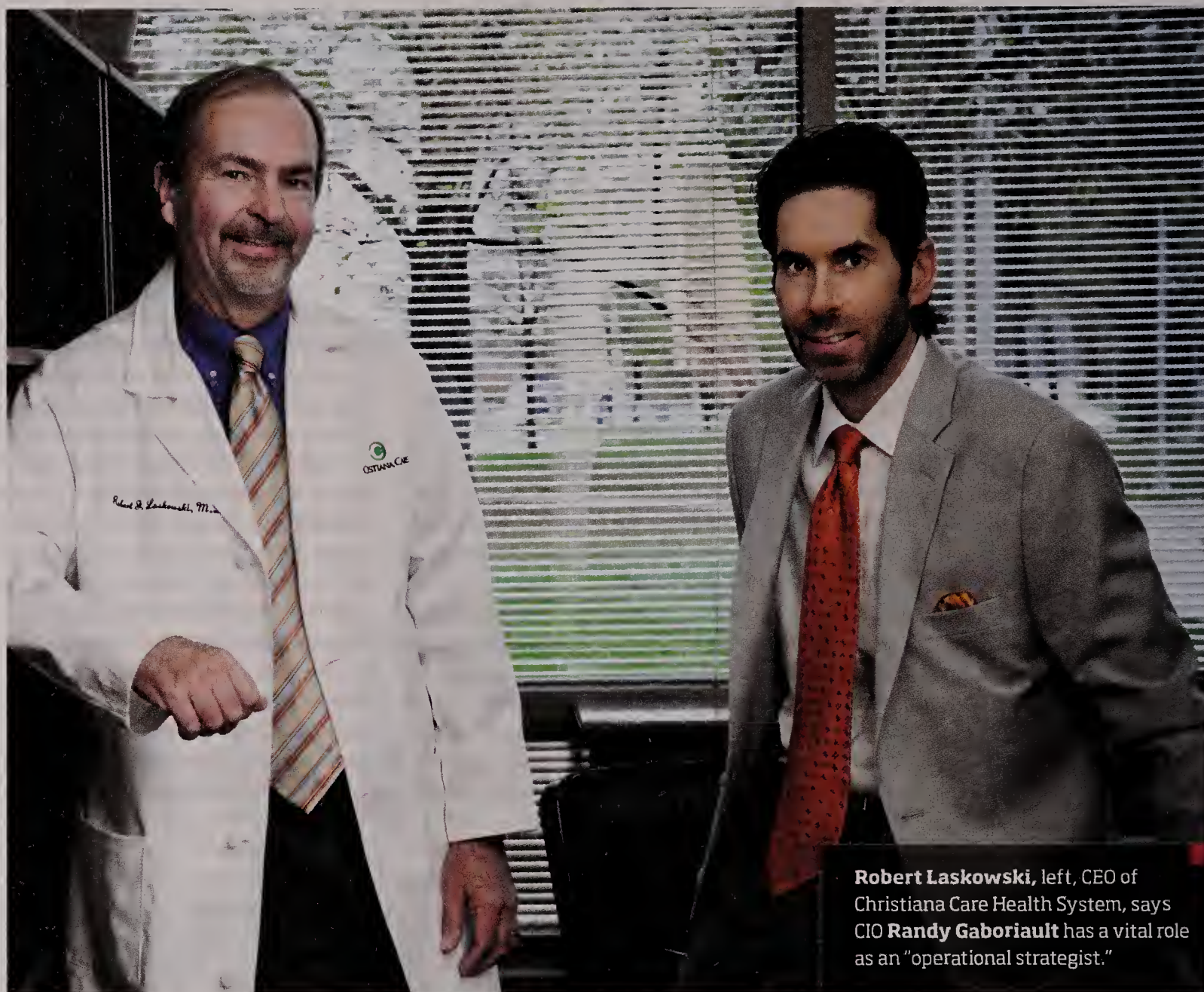
to use and nice to look at. It is also emotionally pleasing. It's fun and almost compels users to engage with the data. This leads to the second theme, compulsive collaboration. People already like to collaborate, but sometimes technology gets in the way. Our software is designed to enable people to collaborate at every stage of the process. And they can use it from anywhere. In fact, we are designing QlikView.next for the mobile platform rather than adapting it from a desktop platform.

Why is the "premier platform" approach the best one?

Our ambition is to touch a billion people with our software. But we can't get to a billion people on our own. We are equipping our 1,400-plus partners with whatever they need in order to embed QlikView in their products, deploy it in different ways, even enhance the product. To help, we recently opened QlikMarket [<http://market.qlikview.com/>], a Web marketplace that delivers an easy, interactive way for our customers to evaluate and acquire the useful technologies and applications that leverage QlikView.

Let's pull back the lens and get the big picture. What are the opportunity costs if IT and businesses don't move to this model?

In the short term, organizations can miss the business discovery insights that lead to opportunity and competitive advantage. But long-term, the most important cost comes from not empowering users. You can see the frustration of business users about mobile device policies. Nearly all companies have moved to BYOD [bring your own device] policies, because they had to. They wouldn't have been able to recruit people if they had maintained restrictive policies that reflected a culture that was inflexible and unable to meet the demands of this new class of users. The inability to attract the new data-aware, data-capable business user will be the most significant long-term impact of not moving to this model.



Robert Laskowski, left, CEO of Christiana Care Health System, says CIO **Randy Gaboriault** has a vital role as an "operational strategist."

leaders to develop IT strategies for responding to government RFPs. Hammonds wants to let everyone know what this group can do. In some cases, the IT role will make proposals stronger and increase the chance of winning the contract, and in others it will enable the company to compete for contracts that might have been out of its reach before.

Hammonds is also looking at how IT could increase the services sold by the commercial air sector. "We're working on solutions to help our airline customers," she says, "as planes become more digital and more data comes off those planes."

But Hammonds is aware that improving productivity within Boeing is IT's primary job. Only about 10 percent of her organization currently works on revenue-driving efforts, and the people who do so are mostly dedicated to that role. While that group may grow in the future, the rest of the IT organization is still focused on internal productivity, Hammonds says.

This kind of split is usually necessary, says Peter High. Chasing revenue could easily become a distraction from maintaining the infrastructure of the business. Balance is required. "CIOs must be cognizant of how they are going to divide their time," he says. Some of the IT leaders he works with assign days to work on core versus revenue-driving efforts, while others pick direct

reports to have daily responsibility for each area while the CIO oversees them both. Whatever they do, they can't forget that IT is still in charge of maintaining the tech infrastructure or they will find that the trust that allows them to work on revenue-producing services disappears, High says.

Adapt to Customer Trends

Unlike aerospace, the housing market isn't a place people often look for IT innovation. But for Hovnanian Enterprises, as it adapts to today's home-buying patterns, technology is essential. Vice President and CIO Nicholas Colisto has formed such a tight partnership with his VP of marketing and sales that "these days, we finish each others' sentences," he says.

When the marketing group found that homebuyers like to research houses online, just as they research consumer appliances, the marketing and IT teams worked together to create a product called Style Suite, which launched last summer. This online design tool allows homebuyers to review options—such as available lots and floor plans, or design elements like cabinets and lighting—but does not provide pricing or allow purchases. The buyer portal is in a limited pilot in New Jersey, but will be rolling out to a wider group in the coming months.

"It's IT's job to take the business goal and translate it into what could differentiate what we offer from everyone else."

-RANDY GABORIAULT, CIO, CHRISTIANA CARE HEALTH SYSTEM

In just the few months since the site's launch, the company has already increased the value of individual sales because customers are now choosing to include options that they didn't know about before. In this pilot, Colisto expects Hovnanian will see a 15 percent average increase in the dollar value of option sales per home, a figure promised by the Style Suite software vendor, New Home Technologies.

"We're turning what is a very long, laborious process into a friendly education and buying experience," Colisto says.

Another new product tackles the other side of the buying process: The people who prefer to visit an on-site sales center so they can see options in person and talk to a sales associate. Prospects often do this on weekends, which creates a swarm of people who have to wait for an available sales associate and mill around looking at static information, like a poster or a brochure.

Colisto's group plans to offer those waiting customers access to Hovnanian's real-time information on homes and options, much like Style Suite, but through a touch-screen interface in the sales center. Customers will be able to do research on-site and even create their own customized brochure that can be used as a launching point when they do speak with a sales associate.

"We're not about alienating the customer from the sales associate, but this will create a more productive, happier visit," Colisto says. The company expects to see gains in sales from this tool similar to what it's already experiencing from Style Suite.

Seek Out Profitable Partnerships

Six years after online stock trading company OptionMonster Holdings was founded, the IT organization not only provides the technology foundation for the business, it is also now responsible for a significant portion of the company's revenue. And CTO Sanjib Sahoo sees that future growing brighter.

The company, which includes retail brokerage TradeMonster, has established a reputation for excellent service—earlier this year, TradeMonster received four and a half stars in the annual Barron's ranking of online brokers. Sahoo wants more. One product IT put into the market is an API that sits on top of the company's trading platform and allows partners to integrate TradingMonster's brokerage functionality into their own sites. For example, when people are reading research or educational material from a partner firm, they can click on companies' names and trade stocks or options within that research site. These tools already represent 10 to 12 percent of the company's overall revenue, Sahoo says, and executives want to boost that figure to 50 percent within the next year.

That product is really for experienced traders, though. For newcomers, OptionMonster is working with partners to build

educational services that in turn provide revenue for the company, Sahoo says. When organizations such as the Chicago Board of Options Exchange (CBOE) offer classes and workshops, they often use a co-branded version of OptionMonster's PaperTrade platform. By getting the class participants comfortable with online trading, "people tend to move on to us and open full accounts," Sahoo says. This last year, the relationship with CBOE generated 30 to 35 percent of the new-account leads that OptionMonster converts to full accounts.

Solving the Big Problems

At Quintiles Transnational, CIO Richard Thomas and his staff are almost becoming old hands at commercializing IT. Quintiles helps its customers, biopharmaceutical companies, make the process of developing and bringing drugs to market faster, easier and more cost-efficient. So it wasn't much of a stretch to take the systems Thomas' group created for internal use and sell them to Quintiles' customers.

The Infosario suite that resulted includes cloud-based services and software for all the processes involved in developing and bringing a drug to market, including big data analytics and software for drug marketing. In the last year, Infosario directly netted over \$40 million in new business, Thomas says.

"For my industry, data is the underlying currency," he says.

It wasn't easy to get to this point. As High points out, the daily efforts to keep your own company running can consume a lot of an IT organization's time. When Thomas came to Quintiles in 2005, he brought in new leadership to change the culture from the top and shift his people into also thinking about the problems the company is trying to solve for its customers.

"That work [on the infrastructure] can fill the day, and unless your focus is on the big problems, how can you know that you're making a difference?" he says.

As the shift has taken hold, Thomas and his people have formed close relationships with the marketing and sales groups within Quintiles, since that is where the real expertise in turning services into product lives. He has also emphasized to his staff the importance of listening to external customers as well as the leaders within the company.

This process of learning about customer needs is creating another commercial service that could have a huge revenue potential, Thomas says. Over the past three years, Thomas' staff has been working with global giant Eli Lilly to create a new service for designing clinical drug trials. They created a team of people from both companies, set up shop in Indianapolis, where Eli Lilly is headquartered, and spent almost three years creating a process that is heavily reliant on analytics and data visualization.



Enhanced Management and Virtualization Tools to Empower the Workforce in the Windows 8 Era

Microsoft Desktop Optimization Pack 2012 helps personalize the user experience, ease application deployment, restore user productivity after a system issue, and manage, monitor and deploy Windows features.

With Windows 8 now providing a common experience across different types of devices, people can now more than ever take advantage of a more flexible workstyle, using enterprise tablets, laptops and desktops as well as their own devices. The Microsoft Desktop Optimization Pack (MDOP) for Software Assurance provides the tools to best achieve the productivity, manageability and virtualization goals that will make this new level of flexibility pay off.

MDOP 2012, the latest release, complements the newly available Windows 8. As Windows 8 offers premium features designed to provide the mobile productivity, security, manageability and virtualization needs of today's businesses, MDOP helps enterprises take advantage of desktop virtualization and manage Windows features.

Additionally, "By using MDOP, IT departments are able to save time managing Windows devices and address the challenges historically associated with troubleshooting," says Stella Chernyak, Senior Director of product marketing for Windows.

» Unwrapping MDOP's Business Value

MDOP is a suite of technologies designed to enable that well-managed environment. Available as a subscription for Software Assurance customers, it was first offered in 2007 and has been continuously updated with two or more

release updates each year since, to enhance manageability and monitoring of desktops across the enterprise. MDOP 2012, released in November, provides enterprise IT enhanced manageability and virtualization for both Windows 7 and Windows 8.

» Virtualization and Personalization

As more people use more devices to do work, it's increasingly important for enterprises to be able to offer a consistent and personalized experience on diverse devices. MDOP provides key virtualization technologies to help personalize the user experience and simplify app deployment.

Application Virtualization (App-V) transforms apps into centrally managed services so businesses can provide end users with access to virtually any application from anywhere without installing apps directly on their computers.

In App-V 5.0 virtual applications leverage Windows standards for a consistent user experience and work more like traditionally installed applications. This means that people don't have to change the way they use an app just because it's virtual.

With App-V 5.0 businesses can connect individually packaged App-V applications and enable them to

communicate with each other as well as with natively installed applications. IT can also centrally manage application interaction as well as administer App-V via a new Web-based Admin UI, making it easy to manage App-V from any machine.

User Experience Virtualization (UE-V) is a user-state virtualization solution that enables users to change devices while keeping a personal and consistent Windows experience that matches their unique workstyles.

With UE-V, the personalized experience can roam across Windows versions, so users don't have to reconfigure apps each time they log in to Windows 7 or Windows 8. But IT can exert some control around what is allowed to roam. According to Stella Chernyak, Settings Location Templates tell UE-V agents which application personalization should be made available, and works for both traditional and virtual applications. "This approach gives users a consistent application experience even if they have to switch devices on the fly," she adds.

» Manageability, Monitoring and Deployment

MDOP's management technologies help manage, monitor, and deploy key Windows features such as BitLocker and Group Policy.

Microsoft BitLocker Administration and Monitoring (MBAM) helps organizations improve compliance with their encryption policies by providing a number of capabilities to enhance BitLocker.

MBAM benefits include simplified deployment and key recovery, centralized provisioning, monitoring and reporting of encryption status for fixed and removable drives, and minimized support costs. Scalable to the 100,000-device level, MBAM makes it easier for IT to encrypt new devices—even those previously delivered to users in an unencrypted state.

Advanced Group Policy Management (AGPM) keeps enterprise-wide desktop configurations up to date, enabling greater control, less downtime, and reduced total cost of ownership (TCO). Enabling IT to manage user and desktop settings on many computers at once, AGPM helps IT avoid downtime that can result

from improperly configured or conflicting group policies and provides enhanced diagnostics capability to quickly pinpoint and resolve problems.

Another key aspect of MDOP, the **Diagnostics and Recovery Toolset (DaRT)** makes it easier for IT teams to recover PCs that have become unusable by helping rapidly diagnose issues and quickly repair unbootable or locked-out systems, all without leaving their desks—and much faster than the average time it takes to reimagine the machine. With DaRT, IT is able to shift desktop repair from reactive to proactive, saving time and removing challenges associated with troubleshooting and repairing system failures. The latest version supports Windows 8 devices.

» Enabling the Flexible Workstyle

The components of MDOP provide important features and benefits that can empower your workforce, make it easier for people to take advantage of a more flexible workstyle, and assist IT in managing, monitoring and deploying key Windows features. UE-V provides users with a consistent and personalized experience regardless of the device being used, so they have the option to change their device and keep their experience without needing to reconfigure applications or desktop settings each time they log in to Windows 7 or Windows 8. And with App-V, businesses are able to provide access to virtually any application anywhere. DaRT allows administrators to shift desktop repair planning from reactive to proactive, saving time and reducing the challenges associated with troubleshooting and repairing system failures.

As workers gain from new technology that enables a more flexible workstyle, businesses need the ability to better manage and optimize the desktop experience across devices and ensure access to apps from virtually anywhere. To find out more on how new features of MDOP 2012 can help your organization virtualize the user experience, deploy applications, manage features within Windows, and restore user productivity after a system issue, please go to www.microsoft.com/mdop.

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"We're turning what is a very long, laborious process into a friendly education and buying experience."

-NICHOLAS COLISTO, CIO, HOVNANIAN ENTERPRISES

Now that work is bearing fruit. Eli Lilly has a service designed for its needs, and Quintiles is starting to market that service to other pharmaceutical companies. Full launch is still in the works, but Quintiles is already seeing more than \$400 million in new business from early sales that include this new offering, Thomas says.

Consequently, executives decided to set up a new business unit for the service—called the Center for Integrated Drug Development—with its own P&L. Quintiles appointed Rick Sax, SVP and global head of integrated clinical services, to lead the unit. While Sax is staffing up the front office, Thomas's IT staff is handling the technology back end, and what Thomas says was "just an exciting idea" three years ago is now on the verge of being another IT-driven service in Quintiles' product portfolio.

Seizing the Opportunity

Technology can be especially powerful when it improves the sales process. TBC Corp. operates multiple tire and automotive services brands throughout the United States, Canada and Mexico, including Big O Tires, National Tire and Battery, and Midas. In every retail and service location, sales associates are faced with an overwhelming variety of options for the many makes, models and model years of vehicles. When the company decided to upgrade its existing point-of-sale systems, CIO Steve Smith saw an opportunity to streamline the sales process.

The new system, which is still in pilot, has a sexier acronym than name—Next Information Technology for Retail Operations, or NITRO—but the real excitement comes from what it enables. NITRO, which combines more than 35 data feeds about parts, service and tires into a single system that sales associates access via a cloud-based HTML5 touch-screen application, has already boosted overall sales by 5 to 15 percent. The reason: Associates only have to type in the vehicle identification number to get a display of exactly what parts it needs and what's in stock and available to sell.

"Our associates are using the system to promote a wider array of vehicle maintenance services than just tire replacement," Smith says. "They literally show the customer a graphical schematic of their vehicle, complete with the maintenance history and service recommendations based on manufacturer-provided guidelines."

The application guides associates through the entire process. This makes sure they can't get anything wrong—creating greater trust with the customers—and also makes them more efficient. The more efficient they are, the more sales they do each day. And with each sale coming in at a higher return, revenue should keep growing as the system is rolled out across the company. (See more about NITRO in "Selling to Sales," Page 30.)

Selling Homegrown Tech

Sales, however, are not the goal at Christiana Care Health System—it's improving patient care and regulatory compliance, says CIO Randy Gaboriault. But some of the healthcare IT advances developed at the hospital can be packaged up and offered to other hospitals. For example, Christiana Care created a telemedicine command center for intensive care units (ICU). This improves patient care by having experienced doctors and nurses remotely monitoring multiple ICU patients and taking fast action when life-threatening symptoms occur. As a bonus, it also generates revenue. Christiana Care brought in tens of millions of dollars in the last year by selling eCare ICU and other telemedicine services to fellow hospitals, the company says.

To become a revenue-generator like this, you must separate core processes from the ones that could be key competitive differentiators, Gaboriault says. Improving the billing process, for example, is important, but in an industry with such tight margins, it's the services that will get a patient a quicker response and treatment that will make a competitive difference to a teaching hospital like Christiana Care.

"There's not a magic way of saying we're going to drive business, but it's IT's job to take the business goal and translate it into what could differentiate what we offer from everyone else," Gaboriault says.

IT is also helping Christiana Care win federal grants for healthcare reform. In June, the hospital won a \$10 million grant from the Center for Medicare and Medicaid Innovation to create a model for coordinating care of patients who have been discharged from hospitals after a cardiac event. A key step is consolidating the information that is collected and created about each patient, and making it possible for that information to travel with the person. Gaboriault, who is at the forefront of this effort as the chair of the Delaware Health Information Network, says the results could be turned into additional products and used across the United States.

Robert Laskowski, president and CEO of Christiana Care, knows the value of having his organization's CIO serving as what he calls an "operational strategist," turning mission needs into practical action and tools. "The way [Gaboriault] conceives of the CIO role is exactly what we need," he says.

And when those tools bring in money, the company can provide even better treatment. "IT here is not a technology issue for us, or even a means to an end," Laskowski says, "but a catalytic enabler of a whole new way to practice our profession." **CIO**

Diane Frank is editorial manager at the CIO Executive Council.

Making Big Data Approachable and Valuable

Market
Pulse

ORGANIZATIONS ARE USING DATA VISUALIZATION TO DERIVE VALUE AND SUCCEED WITH BIG DATA

While Big Data has captured the interest of enterprises looking to gain better insight into their business and reveal new opportunities, many of these organizations are challenged to realize near-term returns on their Big Data investments.

Few would argue the benefits of analyzing Big Data, which include finding answers to help boost productivity, improve customer satisfaction, eliminate inefficiencies, and highlight potential new business. Yet getting answers out of Big Data can be tricky; the often voluminous and changing nature of Big Data requires the right expertise to uncover business insight, as well as effective tools to deliver those results to key people in the organization who can act upon them.

Traditional Big Data tools and techniques can be complex and difficult to use. Enterprises need tools that are designed to quickly and easily extract information from Big Data without requiring users to have extensive training. Enterprises that fail to empower their employees with such tools run the risk of missing important opportunities.

» Visualize the Benefits

Data visualization is an important component of an enterprise's overall analytics strategy. By offering a point-and-click interface to analytics, data visualization produces better analyses and faster decisions, and enhances collaboration.

According to a recent IDG Research study, among the respondents who say their organizations are highly or somewhat effective at Big Data analysis, 58% have already implemented, or are in the process of implementing, a data visualization solution; another 40% expect to implement one. Put another way, of those who are most effective with Big Data, 98% have data visualization squarely in their sights.

"Data visualization enables focus to make better decisions faster," says Tammi Kay George, manager of R&D Program & Project Management at SAS.

Data visualization enables users to better convey results to other employees with clear graphs and interactive animation, enhancing communication and collaboration. These data visualization solutions provide a powerful and comprehensive analytical environment without the need for coding, and an extendable point-and-click environment for exploring and analyzing data and dynamically linking statistics with graphics. What's more, data visualization solutions that hold data in memory during the visualization process can significantly improve productivity.

Key features of effective data visualization tools include:

- » Highly interactive graphics
- » Visual querying
- » Data filtering and effective drill-down capabilities
- » Autocharting
- » Easy report building, collaboration, and distribution (e.g., Web portals, mobile devices)
- » In-memory processing capabilities

By leveraging data visualization to derive value from Big Data, enterprises can get the most from their Big Data and ensure they unlock the insight stored in their own information.



Big Data Challenges

The top three business intelligence challenges organizations face in analyzing Big Data:

Lack of skills/expertise needed to run analysis on all the data

57%

Too difficult to access all data and make available to users for analysis

50%

Not effectively using our most valuable data to drive decisions

45%

SOURCE: IDG RESEARCH SERVICES, AUGUST 2012

Complimentary white paper featuring data visualization tips and tricks | sas.com/datavizwhitepaper



connect

30



SOUNDING BOARD

Selling to Sales

CIOs are soliciting ideas, building trust and embracing lessons learned to build tools sales teams want to use

SHERYL FIKSE, SOUTHWIRE

GET CONTINUAL INPUT

Almost a year ago, we set out to ensure that our salespeople are better equipped than anyone else who could call on a customer. We created two new tablet applications that provide real-time access to the information we hold on customers and inventory. The customer-focused app rolled out in June and the configuration-management app went live in September, and we're seeing an amazing rate of adoption.

This could not have happened without significant involvement from leaders throughout the company. In fact, the vision for the configuration-management application actually came from the president of our largest division. During development, we continually demonstrated the apps to the teams of business staff assigned to each initiative, and their feedback and suggestions made both applications stronger in both big and little ▶▶▶

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Sheryl Fikse,
CIO, Southwire



Steve Smith,
Senior VP and CIO,
TBC Corp.



Tim Elkins, CIO,
PrimeLending

ways. For example, one regional vice president shared a thought when we were fairly far into development of the customer application: It would be good if we labeled the various elements in addition to color-coding them, because some people are color blind. Those kinds of ideas make as much of a difference as input on necessary elements or processes. And now we are constantly receiving emails from users throughout the business saying, "Great app!"

STEVE SMITH, TBC CORP.

LEARN TO CREATE TRUST

TBC provides tires, brakes and automotive services to consumers and dealers under a number of brands, including Merchant's Tire and Auto Centers on the East Coast of the United States and Midas across North America. Looking for a new point-of-sale system for our more than 4,000 locations, there was nothing available in the market, so we created a cloud solution that would make the interface easy and intuitive. The enhanced Web page looks like a mobile application, and it's designed to create an interactive experience that raises B players to A players, and to make our A players exceptional.

This was the brainchild of me and two of my peers from the retail operations group. They brought valuable insight at that top level because they oversee all the automotive service centers across our brands. In essence, we built a guided selling system. It automatically populates information on each car based on the vehicle identification number and prompts the salesperson about the products and services for that car based on information in 35 back-end data feeds. Trust is a big deal in our industry, and this interactive tool lets our salespeople be experts and our customers feel confident that they are getting a great deal. (For more, see "Moneymakers," Page 20.)

TIM ELKINS, PRIMELENDING

EMBRACE UNEXPECTED LESSONS

We knew two years ago that we were outgrowing our loan origination systems, and we had three main criteria for a new one. First, it had to be Web-based to reduce maintenance and ensure accessibility. Second, it needed to be an end-to-end system that could support the entire loan lifecycle. Lastly, the system had to be scalable. Leaving behind smaller, more familiar systems was the hardest thing to get our users on board with.

After IT narrowed down the viable vendors, our head of national production picked a committee of about 10 loan officers. This group helped with the final selection and testing of each component as we developed them. However, even with all this up-front work, we found that we hadn't headed off resistance from the field. Many were not used to having a workflow and rules-based system, which they felt slowed them down. On top of this, there was significant missing functionality that had not been identified by the committee.

This does not mean the software didn't work. Change will always breed resistance, but having the business involved from the outset was critical. We are taking the same approach with the mobile solution now under development, with that prior experience at the top of our minds.

TAKE Note

Engage With Customers

DOWNLOAD On this call, IT leaders discussed the emergence of consumer-driven social collaboration networks and how, as a result, IT is adapting and building the foundation of a new way of doing business. At the heart of this evolution is the fundamental shift from the old vertically integrated, hierarchically structured business model to a new horizontally structured business network model. The CIO Executive Council partnered with author and business strategy adviser Peter Moore to examine this transformative change and explain how CIOs can lead their companies' efforts to adjust to this new way of doing business.

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Delivering in Local Markets

DOWNLOAD In this installment of the IDG Enterprise CIO Interview Series, Rod Hefford, CIO for global customer development and supply chain at Unilever, talked to John Gallant, chief content officer at IDG Enterprise (CIO's parent company), about how IT at Unilever drives innovation globally by leveraging tech talent around the world and helping improve delivery in local markets such as Brazil, India, Europe and the United States. Hefford also explained how mobility fosters improvement and allows local employees to respond to changing market conditions and customer needs.

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How to Lead Diverse Teams

DOWNLOAD Female IT leaders bring a unique leadership style to this male-dominated profession. In this webcast recording, Pamela Rucker, co-chair of the Council's Executive Women in IT community of practice, led a discussion of tips for translating corporate vision into a successful leadership strategy. Rucker, former vice president of IT at an environmental cleanup company and founder of The Rucker Group, was joined by Karla Viglasky, global CIO of ITT, who also shared her experiences in leading her team to drive business growth.

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Raising Risk's Profile

Information security is often seen as too much trouble—until it fails. How can CIOs truly make it part of enterprise risk management? **BY MARTHA HELLER**

So, a guy walks up to another guy who is clapping. The first guy asks, "Why are you clapping?" The second one answers, "To keep the alligators away." Confused, the first guy says, "But there are no alligators around here." And the second says, "See? It's working!"

Such is the situation that many CIOs find themselves in when selling IT security to the executive committee. "When the CIO says, 'I'd like to spend this amount on security,' it's rarely, 'Are you sure you're spending enough?'" says Steve Rubinow, CIO of FXall, an electronic foreign exchange platform. "Instead it's, 'We haven't had any problems; maybe you're spending too much!'"

The ROI Paradox. Perhaps the clearest aspect of the IT security paradox is this: "There is no easy ROI on security." And, says Rubinow, you cannot guarantee that your systems are 100 percent secure. Plus, security threats can be subtle, with countries targeting intellectual property, not customer data.

With no real security emergencies at his own company, Rubinow leverages news of breaches elsewhere in his industry. "I don't wish a security crisis on anyone," he says, "but when it happens, I say, 'OK, team, let's get out the security PowerPoint; we have a window of opportunity.'"

Like most financial services CIOs, Rubinow also brings in a rotating set of consultants to execute penetration tests and benchmark his security investments against his competitors'. "If we brought in our peers from other organizations, would they view our investments as reasonable?" he says. "Would an objective set of eyes say we are spending the right amount?"

The Product Paradox. For Mike Rosello, VP of IT and operations at Alliance Data Systems Retail Services, the paradox lies in the trade-off between market competitiveness and security. "We are in the business of managing data, so strict security is an absolute must," he says. "We need to have effective security protocols while also stay-

ing competitive with our capabilities in the marketplace."

The solution is to have security staff on the design team, which is especially important because different proposed solutions bring with them different security concerns. "You don't want the security team telling the business why they can't get what they want," Rosello says. This means coaching the team on a skill that may not be innate. The more your security team can educate the business and sell security services to them, the more effective that up-front conversation with the business will be.

"You don't want the security team telling the business why they can't get what they want."

—Mike Rosello,
VP of IT, Alliance Data Systems

The IT Paradox. Security can't be only IT's problem. "When security is discussed as an IT issue, as opposed to an issue of business risk, it is often an unbudgeted afterthought," says Mark Silver, divisional information officer at Siemens Healthcare. "But if something goes wrong, it is not IT alone that is held accountable. When I speak with CFOs, I remind them that ROI also stands for 'risk of incarceration.'"

CISOs, who Silver believes should report to CFOs or chief legal officers, need to align their approach with the company's overall risk profile. "Are you bullish? Are you heavily regulated? Is your profile changing?" asks Silver. "If the SEC is starting to fine your competitors on a certain activity, your risk profile has just gone up."

Once a CISO determines the risk profile, they need to make information security systemic to the organization. "As we start any project, we consider time, resources and quality," says Silver. "It is not a stretch to add information security to quality considerations. By making security core to your project management methodology, all of the stakeholders assess whether the project matches the risk profile."

Martha Heller is president of executive recruiting firm Heller Search Associates and author of *The CIO Paradox*. Follow her on Twitter: twitter.com/marthaheller.

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DIY Dollhouse

Many little girls like to play with dolls, but what if that play could also help them learn skills that would be useful for a career in a science, technology, engineering or math (STEM) field? Three Stanford University students who grew up playing with tools, chess sets and Legos have now developed Roominate, a dollhouse designed to teach young girls about STEM topics. “The toys we played with growing up really affected what we are doing today,” says Jen Kessler, co-founder of Roominate. “We took something girls love and made [it] better.” Roominate looks like a regular dollhouse when completed, but it arrives in pieces, which girls use to construct the house, build the furniture and connect a simple electrical circuit that powers a fan and the lights in each room. The students have sold about 2,000 houses so far. “Our hope is that it will cause young girls to ask questions and learn more about how things work,” Kessler says. “We hope it will get them familiar with the thinking that is required in STEM subjects.”

—Lauren Brousell

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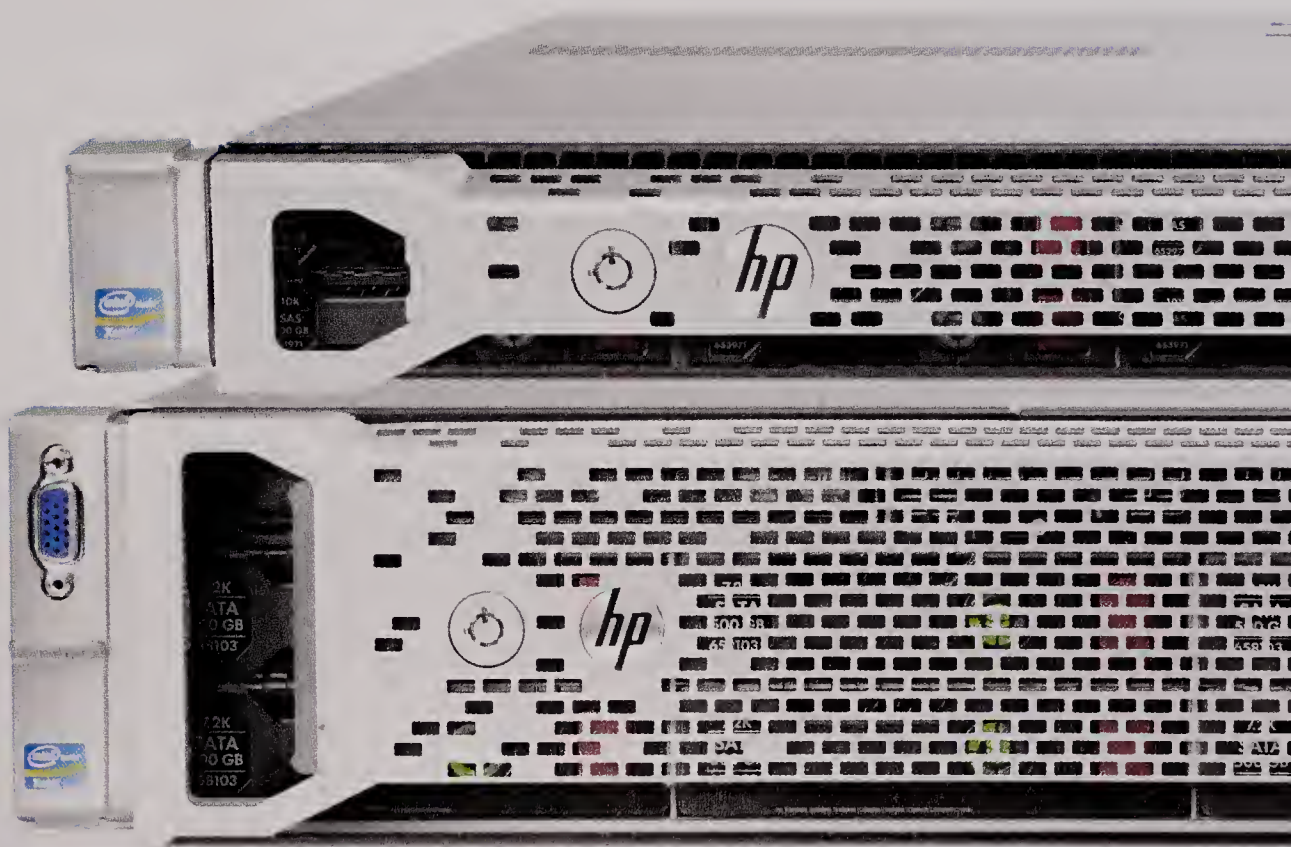
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